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## When Is the Burn Injury Healed?: Psychosocial Implications of Care

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The psychosocial and economic effects of burn trauma are profound, not only for the patients, their families, and the burn unit staff members, but also for society as a whole. Understanding the perception of stresses experienced by patients, families, and staff is discussed, and related strategies to assist in reducing the stress are presented. A comprehensive psychosocial support system can assist the nurse in reducing the psychosocial morbidity of severe burn trauma (KEYWORDS: burn trauma, psychosocial support, patient stress, family coping, nursing staff stress).



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He appeared calm as he began the story of how he was burned and the experiences he had while recovering. Mrs. J. sat beside him. listening intently to his story with glistening eyes. Mr. J sustained a 60% total body surface area burn injury during a helicopter crash. In addition to partial and full-thickness injuries, he had fractures of both femurs.

As he retold the horror of the accident and the sensations he felt while his clothes, skin, and hair were burning, his voice was strong. He had told this story often. But his voice began to quaver as he described the weeks and months of painful treatments and the uncertainty of the future. The anguish of being dependent on others for so long was visually evident in his facial expressions.

Mrs. I described the shock of hearing the news of the accident, seeing her husband for the first time, and the uncertainty of the future. He was transferred more than 2,000 miles to a burn unit within hours of the injury. She somehow found the strength to make child care and travel arrangements. She was fearful because she had never traveled more than 100 miles from home, and she knew she would be alone.

Glimpses of the weeks of worry and depression were evident in her expressions as the story unfolded. She described the significant turning point for her in the long wait. Returning from a visit, her hope was diminishing because it had been so long since Mr. I recognized her. That night the nurse called her at 11 p.m. to give her a message of love from her husband; the message included the use of his pet name for her.

Many nurses who had cared for this man and his wife were deeply moved by hearing Mr. and Mrs. J.'s version of that long hospital stay. As I listened to the stories of Mr. and Mrs. J, I reflected on the role of the nurse in helping patients and families through such a tragedy. What does the patient worry about during the various stages of recovery? Are there ways for nurses to minimize the psychologic stress experienced by patients, families, and themselves? What are the family needs as they perceive them versus the perceptions of the nurses? Are they met? Could they be met better with different interventions? How do nurses cope with the demands of treating burn patients? I believe a psychosocial support program in a burn unit involves considering the answers to all these questions.

## WHY THE NEED FOR COMPREHENSIVE PSYCHOSOCIAL **SUPPORT?**

Approximately 100,000 patients with burn injuries require hospital admittance each year. As advanced technology and new inter-

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ventions decrease mortality, quality of life issues become of greater importance. The psychosocial and economic effects of burn trauma are profound, not only for the patient and family, but also for society as a whole.

Initial data obtained while developing a burn-specific health scale indicated that the psychosocial performance of patients with major burns lagged behind their performance in other areas of the recovery process.<sup>3</sup> About two thirds of patients have some psychologic disability that requires therapy at hospital discharge and for as long as 6 months afterward. The sequelae are mild to moderate in most patients and relate to issues of depression, anxiety, and alcoholism. There is evidence that some problems, if not treated, can persist for an extended period.<sup>3,4</sup> The variance in psychosocial adjustment usually does not relate solely to the extent or degree of burn injury. It is the effect of other factors, such as anatomic location of injury, employment status, loss of family role, strength of family support systems, age at time of injury, and previous history of psychiatric illness, that correlates with psychosocial adjustment.<sup>2,4-9</sup>

The role of various types of social support on the adjustment process was identified as a priority at the National Institutes of Health Consensus Conference on Burn Injuries. <sup>10</sup> The literature supports providing structured psychosocial help to patients and families during hospital stay and after discharge to reduce the psychosocial impact of burn trauma. <sup>9,11-18</sup>

Comprehensive psychosocial support in a burn unit also needs to include providing support to the staff caring for the patient. Because nurses are the most constant feature of the patient's environment, the stress is observed most consistently in this group of health care providers. 19 Understanding the stresses of providing nursing care for burn patients and self-recognition of the manifestations of that stress are crucial to remaining an effective and compassionate nurse who is capable of providing the support needed by the patients and their families. This article is intended to increase nurse awareness to the psychosocial implications of caring for burn patients and their families. Through knowledge, the true art of nursing can be realized in providing care to this special patient population.

### THE PATIENT'S PERSPECTIVE

A burn injury is one of the most traumatic, dehumanizing injuries an individual can experience. The adaptive problems that normally occur while recovering from burn injury are well described<sup>20</sup> (Table 1). Finding effective psychologic interventions remains a priority.<sup>10</sup>

The physical response and care for a severe burn injury occur in three phases: resuscitative, acute, and rehabilitative. It is helpful to consider psychologic responses to burn injury as stages of adaptation. Table 2 lists seven stages of adaptation related to the phases of care, although patients do not move linearly through these adaptation stages. The emotional responses often are like a pendulum, moving in and out of "stages" as the patient undergoes a variety of treatments and procedures. All extensively burned patients have some manifestations of most of these stages as they physically progress through the phases of care.

## Resuscitative Phase

The patient may be alert and oriented initially, but hemodynamic instability, analgesics, and sedatives may subsequently induce confusion and disorientation. Inappropriate behavior or uncooperativeness with treatments may occur. The use of restraints may compound confusion. The nurse needs to reassure the patient and explain why restraints are being used.<sup>21</sup> Patients questioned later about this period often do not remember it or have confused memories. The first stage of adaptation, *survival anxiety*, may begin on

## **TABLE 1. Common Psychologic Adjustment Problems to Severe Burns**

Threat to survival

Physical and psychologic pain from injury and treatment

Fear of disfigurement

Long recovery process/conflict with dependency

Separation from loved ones

Alteration in family roles

Effect of injury on future plans

TABLE 2. Stages of Psychosocial Adaptation in Burn Recovery

Stage of Adaptation	Phase of Care	
Survival anxiety	Resuscitative Early acute	
Adaptation to severe pain	Acute	
Search for meaning	Acute	
Investment in recuperation	Acute	
Acceptance of losses	Acute, rehabilitative Rehabilitative	
Investment in rehabilitation Reintegration of identity	Rehabilitative	

From Watkins PN, Cook EL, May SR, Ehleben CM. Psychological stages in adaptation following burn injury: a method for facilitating psychological recovery of burn victims. J Burn Care Rehabil 1988; 9:376-384.

admission.<sup>11</sup> The patient is tremulous, startles easily, and may have difficulty in concentrating. Anxiety is related to the fear of dying.<sup>9,11</sup> Effective interventions include providing information about prognosis, repeating instructions often, and orienting the patient to reality (day, time, place) frequently. This period of physical and emotional instability is short when resuscitation is successful.

### **Acute Care Phase**

The longest period of adjustment occurs in the acute phase, which lasts until the burn wound is closed by healing or grafting. Patients say that their most vivid recollections are of the nurses and the care they gave. Because most units limit family visitation, the staff becomes the patient's "significant other," and the patient begins a "career as a burn patient." Most or all of the adaptive problems previously identified can be expected as the patient moves through the seven stages of adaptation.

Survival anxiety may continue. As the patient's physical condition stabilizes, anxiety related to potential disfigurement and changes in future identity and roles may lead to depression, withdrawal, and regression. Prognostic information is most important to the patient at this stage. Questions like "What

happens next?" or "What will happen to me?" often are the first sign of their worries. Allowing expression of these worries and providing accurate information is essential in providing support.

A major problem during the acute phase is adaptation to severe pain. 11 Patients have trouble dealing with the pain when it is inflicted by the staff that they depend upon for support. Pain management strategies include pharmacologic and nonpharmacologic interventions to alleviate pain or help patients control it. Patients are anxious about their ability to cope with pain, so allowing them some control in the treatment process is an essential component of an effective pain management program. Simple patient education that focuses on what to expect during wound care and how to relax has been effective in reducing perceived pain.13 Control also is an important element of the effectiveness of patient-controlled analgesia. The article on pain management in this symposium describes specific pain interventions and their application.

Many patients say the pain was the worst part of their hospital stay. <sup>16</sup> Nurses must become knowledgeable in the use of pharmacologic and nonpharmacologic pain management strategies. Although this is a concern of most nurses who care for burn patients, few have adequate knowledge in this area. Thus, burn patients often remain undertreated for their severe pain. Effective pain management must become a major focus of nurses in meeting the psychologic needs of the patient. <sup>9,21-23</sup>

As patients become more alert, they search for the meaning of what has happened.<sup>11</sup> Detailed and repetitious recounting of the events of the injury occurs. The recounting is useful in desensitizing patients to the horror of what has happened and decreasing nightmares.<sup>9,11,22</sup> Nurses need to listen to the patient, provide support, and avoid judging the patient's explanation for the injury.

With the beginning of grafting procedures and wound closure, patients become more *invested in recuperation*. They look to the staff for "bench marks" of progress and begin to acknowledge their new status as a burned person. Frustration and depression may be expressed regarding the slowness of recovery. Often, progress is made only to be lost because of additional surgical procedures

and immobilization. Because the staff members are consistently optimistic about the recovery process, the patient does not always trust all of the information given. Specific progress information given by the surgeon becomes the most valued.<sup>22</sup>

Boredom becomes a major problem even when patients begin to socialize with each other. The routine becomes monotonous. When staff members plan special events, such as a pizza party, that alter the routine, morale improves. Inspirational tapes or visits from burn survivors may provide additional motivation for patients to work hard at the recovery program.<sup>22</sup>

As patients are encouraged to become more independent, there often is resistance. The pain associated with increased activities may be interpreted as indicative of lack of progress. In addition, the patients and staff may have differing perspectives of "being independent." Expressions of dislike or hatred for individual staff members are not unusual. <sup>22</sup> At this point, it is important to establish a daily program with the patient that sets readily achievable goals so that recognizable progress can be attained. Motivation is increased with the attainment of such incremental goals.

When independence increases, the recognition of losses becomes clearer. Accepting losses is an emotionally difficult stage for the patient. 11 As socialization occurs, patients compare their situation with that of the other patients. Patients are comforted by their perceptions that their injuries are not as bad as someone else's. It is during this phase that the patient may first see their scars and begin to grieve for their losses. Their fear of appearing as a "monster" to others produces anxiety when the patient leaves the burn unit for the first time. In addition, financial concerns and worry about the future can produce anxiety and depression. Tearfulness, decreased appetite, sleep disturbances, bargaining for release from activities, and depression are common manifestations of this stage.

Nurses should allow verbalization of these fears and validate that they are "normal." Nurses should support the patient during the grieving process. Taking trips away from the unit to the cafeteria or outside the hospital with family helps the patient to deal with the reactions of others. 15 Patient support groups

are particularly useful in promoting the verbalization of the emotional reactions to such trips and helping the patient understand that such fears are not unusual.<sup>14</sup> Social service personnel and chaplains can help patients deal with financial planning for discharge and spiritual dilemmas.

#### Rehabilitative Phase

In the rehabilitative phase, patients renew their interest in the outside world. Although critical care nurses may not interact with patients during this phase, knowledge of the patient's concerns can help the nurse to prepare the patient/family for this stage. "Letting go" of the protective burn unit environment is not an easy task for the patient and may result in some "acting out" behaviors as discharge approaches.

The last two stages of adaptation (invested in rebabilitation and reintegration of identity) occur just before discharge, during outpatient treatment, or several months to years after discharge. 11 The goal of these stages is regaining the pre-injury level of function. Providing reassurance that the patient will be able to adapt is the most helpful strategy. Providing information about additional needs for reconstructive surgery and therapy assists the patient in establishing realistic goals. Some facilities use group therapy and education to prepare patients before discharge for reintegration into the community and family roles.<sup>15</sup> Providing resource material about self-help groups can be vital in helping the patient make independent decisions related to additional psychosocial support. Once a person gives up the victim persona and accepts that they are a burn survivor, they are emotionally healed.

#### THE FAMILY PERSPECTIVE

Having a family member who is severely burned and in the hospital for a long time messes with your concept of hope. You are living day to day or even hour to hour.

Burn patient's family member

The acute nature of burn trauma frequently leads to a crisis for the family of the patient.

Normal coping mechanisms are overwhelmed, and a state of disequilibrium occurs. There is a threat to survival of the family unit. 9,21 High levels of stress usually occur during the acute phase of the patient's hospital stay and generally recede during the recovery phase. 24 Strategies for reducing anxiety and promoting healthy coping mechanisms help the family provide the crucial support needed for recovery. If the patient is not likely to recover, crisis intervention therapy can help the family make the necessary decisions related to the dying process.

An accurate assessment is important to effectively meet the family's needs. Although the needs of the families of critically ill patients are known, there is little published regarding the needs of burn patients' family members.25 Because burn patients remain acutely ill for extended periods, the needs of the families may change as recovery proceeds through the various phases of care and the patient progresses through the stages of adaptation. Table 3 displays the most important needs identified by family members at the US Army Institute of Surgical Research within the first 72 hours after admission of the patient.<sup>26</sup> The eight needs indicated by asterisks continue to be important throughout the continuum of care, until the time of discharge

## TABLE 3. Most Important Needs as Perceived by Family Members of Critically Burned Patients within 72 Hours of Admission

to know the expected outcome\*

To have questions answered honestly\*

To know how the patient is being treated medically\* To know specific facts about the patient's progress\* To feel there is hope\*

To be assured that the best care possible is being given the patient

To be called at home about changes in the patient's condition•

To feel that hospital personnel care about the patient. To know exactly what is being done for the patient. To be told about transfer plans while they are being

To see the patient frequently

from the burn center. As Mrs. J. indicated, the need to be told about changes in the patient's condition when they occur is an important need. This was the only need consistently identified (throughout a 6-week period) as important by the family member and the nurse caring for the patient.<sup>26</sup>

Nurses may be unaware of the specific needs of individual family members. Consequently, a careful assessment of each family's needs as perceived by the family members is needed. This becomes the foundation for structuring relevant interventions to provide the psychosocial support required.

Just as patients go through stages of psychologic adaptation, so do the family members.27 Initially, families seek assurances and honest information concerning the prognosis. There is an overwhelming need for hope and information. Specific information about the medical treatment and patient progress is most important in the beginning stages of the acute care phase. When family members first visit the patient, they are relieved to find that the patient is alive. Orienting the family to the burn unit is helpful in preparing them for the different environment and for the appearance of the patient. Because of the continuing fear of death and the appearance of the patient, family members often exhibit a great deal of anxiety. The confusion and disorientation of the patient are disturbing, and the family members require reassurance that delirium is a common occurrence during this phase. 1,27

As the patient's recovery progresses, the family members often come to view themselves as an advocate for the patient and a "cushion" from the staff.22 The "pain problem" is a major source of stress. Family members feel helpless and frustrated. Expressing their angry feelings to the staff is difficult because of concern that it will jeopardize the patient's relationship with the staff.<sup>2</sup> It is important that the family perceive that the staff members care for the patient because the advocacy role becomes more stressful as the patient regresses psychologically. 26-28 Allowing the family members to express their feelings is crucial. Support groups can provide a safe environment for such expressions and allow for discussion of strategies for being an effective advocate for the patient.17,18

During the acute phase, the family has many questions concerning the treatment reg-

<sup>\*</sup>Needs that continue to be important until time of discharge.

imens and prognosis. At this point information from the surgeon is important.<sup>26</sup> The use of a variety of educational strategies is helpful in meeting needs quickly. Video presentations about treatment protocols can be shown when it is appropriate to the care of a specific patient. Written information containing definitions of commonly used terms and descriptions of expected care can help in understanding explanations given by the staff.

As patients begin to need to express their feelings, relatives have difficulty in dealing with those feelings. They often discourage such discussions.<sup>27</sup> Additional stress occurs with role reversal in the family dynamics.<sup>22,28</sup> This phenomenon contributes to the patient's dependence/independence conflicts as discharge approaches.

As discharge approaches, the family needs to learn how to provide care at home. Because of their limited involvement in direct care of the patient during the hospital stay, family members of adult patients often find this to be a very stressful period. Parents of children usually are more involved in direct care and thus better prepared at the time of discharge. To reduce the anxiety and stress caused by discharge, early involvement of the family in care is helpful. 9,22,27 More contact between the staff and family for discharge education occurs when visiting hours are extended. As family members learn to apply compression dressings to the legs, treat small open areas, evaluate the healed skin, and apply the pressure garments, they gain confidence in their ability to provide care at home. This type of education for 1 or 2 weeks before the estimated discharge date can be reinforced by providing written material concerning home care. Allowing the patient to take short day or overnight trips outside the hospital provides time for the family to adapt to the reactions of others to the patient's burn scars. Families also may need assistance with financial problems. Additional information concerning self-help support groups in the community can aid the family in seeking help after discharge.

The patient and family are a unit. Meeting the family needs is important to the psychologic recovery of the family unit. The saying "they also serve who only sit and wait" is descriptive of the role family members often must take during the acute phase of the pa-

tient's hospital stay. For the family, the stress of waiting can be as psychologically severe as the burn injury is for the patient. Nursing personnel must consider ways to support the patient/family unit to reduce the emotional stress of the burn injury and the hospital experience.

#### THE STAFF PERSPECTIVE

There are three general areas that provide a framework for examining the stresses experienced by nurses in burn units<sup>21</sup>: the trajectories or expectations of recovery or death; the issue of control in the work environment; and the engagement of burn patients/families in a social-emotional bonding.

## **Trajectories**

At the time of the patient's admission, the nurses quickly develop expectations regarding the patient's recovery or death. This serves as a way to organize their work. Because burn care requires the efforts of a variety of practitioners, conflicts may occur. Each group has different expectations and methods of organizing work. All members of the team soon learn that their personal fund of information is incomplete and that additional information must come from the other disciplines. Without the missing information, nurses become stressed when their expectations of the patient's progression are not met and they find that they do not know what to tell the patient and patient's family about what is happening. These interactions, which may occur at any time throughout the day, are stressful and may lead to avoidance behavior.

Regular (at least weekly) multidisciplinary conferences are essential to the establishment of a consistent and accurate plan of care known to all members of the burn team. Daily medical rounds that provide data on the patient's medical status throughout the past 24 hours and project the day's plan of care can be useful to nurses. The discussions during the rounds may impart an appreciation of the concerns of the physicians for specific problems and enable nursing personnel to organize their work based on the projected care for the day. The benefits of this knowledge

are twofold. Nurses can monitor and evaluate the patient more accurately for expected outcomes, and care can be organized to promote rest periods for the patient.

When a patient dies, the nurses respond based on the circumstances surrounding the death. <sup>22</sup> Was it unexpected? Was it a long, lingering death, with the outcome certain for several weeks? Was it an expected death that occurred quickly? Providing an opportunity for nurses to talk about the death and grieve, if necessary, is important. Otherwise the issue is not resolved, and chronic stress can develop. Nurses sometimes form a strong bond with patients and their families, and attending the funeral or sending sympathy cards can help bring closure in the grieving process.

## Control in the Work Environment

There are three issues of control nurses face constantly in providing burn care.22 The first revolves around the dependence/independence continuum of the patient's recovery. The goal of burn care is to return the patient to independent function. Tension occurs as nurses promote patient independence because of the dependent nature of burn care and the different meaning of independence to the nurse and patient. Patients often are not in control of their daily activities because of the location of their injuries or the immobilizing effects of treatments. They must be bathed, fed, walked, turned, and dressed. The frustration this dependence causes often leads to inappropriate or manipulative behavior by the patient. Nurses must set limits and structure the environment to "control" such behavior. Additional stresses may come from the family trying to function as a patient advocate. When the patient and family are included in the planning of care, they are given accountability and responsibility for some aspects of care and the goals to be achieved. This action promotes independence and a perception of being in "control" of the situation because they are involved actively, rather than passively.

Pain management often becomes an issue of control. Nurses must understand that the authority on the patient's pain is the patient. Only the patient can tell the nurse about the pain experienced. As nurses develop strate-

gies that allow patients some control over their pain management, the stress of inflicting pain will be reduced.<sup>23</sup>

The second area of control relates to patient compliance with the treatment plan.22 Early in the hospital course, nurses socialize burn patients to their role as patients. They creatively try to "hook" the patient into the program.<sup>22</sup> Calling the patient by the name chosen by the patient, providing frequent explanations of the goals of care, and establishing progress bench marks can facilitate patient compliance. The nurse invests a great deal of energy in obtaining patient compliance. Thus, the nurse may experience a sense of failure or frustration when the patient regresses or gives up. One way of sensitizing staff to their reactions to the stresses involved is through videotaped interviews with patients and staff. The tapes of interviews about the stress experienced in the burn unit are useful in stimulating discussion at staff conferences.29

Nurses also become involved in creating an optimistic and positive environment for themselves and the patients.<sup>22</sup> They celebrate birthdays, achievements, and holidays. Planning frequent social events is common. Promoting a professional environment centered on the patients' needs helps to reduce conflicts. When the patient and family know the staff care and are working toward mutually established goals, conflicts are reduced.

A third source of conflicts or stresses related to control is the multidisciplinary nature of burn care.22 Individuals in each discipline attempt to organize care to make their work go smoothly. Conflicts arise every day because of the interdependence of the work: the physician comes into the unit at 11 a.m. and wants to see the burn wounds just after the nurse has spent 2 hours bathing the patient and reapplying creams or dressings; the nurse does not coordinate morning care with the physical therapists, thus limiting the patient's exercise time with the therapists; care is not completed before visiting hours, which causes a delay in the visit or a less-than-optimal visit because the patient is uncomfortable. Once the nurse knows the physician's plan of care as outlined in morning rounds, care can be coordinated by taking time each morning to discuss plans with individuals from all other disciplines involved in the

care. The person who really suffers from uncoordinated care is the patient. The stress that this engenders in the nurses comes from a sense of failure toward the patient in easing the pain of care.

As staff members become oriented to burn care, they need to understand the differences in each team member's work and the types of stresses generated. Understanding and communication promote respect and value for the role each team member has in the caring process.

# Engagement in Bonding with the Patient/Family

In the burn unit, the nurses are a constant in the patient's life. 22 The nurses are the people who encourage, praise, and enable patients to follow the treatment plan toward independence. It is not unusual for strong emotional ties to develop between the patient/family and the nurses. As discharge approaches, the nurses face the stress of breaking those ties. If rapid healing occurs or a rehabilitation bed becomes available, the day of discharge arrives with little warning, and the patient leaves without closure occurring. Frustration, sadness, or a sense of loss are common reactions among nurses to this situation. It is uplifting when the patients and families write to the unit or return for a visit. Seeing the patients do well increases the morale and makes all of the work worthwhile.

## **CONCLUSION**

We can't be more than we are, but what we are is so much more than we believe.

Anonymous

The psychologic and physical effects of burn trauma are severe, but in all experiences, there is an opportunity for emotional growth. Many patients, and family members are proud of their courage during the recovery process and are made stronger by this lifealtering event. When provided consistent and planned emotional support during the hospital stay, patients and families may discover their "reservoirs of strength." Comprehensive psychosocial support of burn patients

and their families is essential in reducing the morbidity of emotional problems resulting from the trauma of burn injury and treatment. In understanding the stresses faced by the patient, family, and staff, nurses can use strategies to reduce anxiety, conflicts, and emotional distress during the phases of recovery. The challenges of providing psychosocial support in the burn unit are many; the rewards are great!

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#### REFERENCES

- Artz CP. Psychological considerations. In Artz CP, Moncrief JA, Pruitt BA Jr., eds. Burns: A Team Approach. Philadelphia: WB Saunders; 1979:461– 465.
- Shenkman B, Stechmiller J. Patient and family perception of projected functioning after discharge from a burn unit. Heart Lung 1987; 16:490– 496.
- Blades B, Mellis N, Munsteer AM. A burn specific health scale. J Trauma 1982; 22:872–875.
- Wallace LM, Lees J. A psychological follow-up study of adult patients discharged from a British burn unit. Burns Incl Therm Inj 1988; 14:39-45.
- Cobb N, Maxwell G, Silverstein P. Patient perception of quality of life after burn injury: Results of an eleven-year study. J Burn Care Rehabil 1990; 11:330-333.
- Berry CC, Patterson TL, Wachtel TL, Frank HA. Behavioural factors in burn mortality and length of stay in hospital. Burns Incl Therm Inj 1984; 10:409-414.
- Browne G, Byrne C, Brown B, et al. Psychosocial adjustment of burn survivors. Burns Incl Therm Inj 1985; 12:28-35.
- Tucker P. Psychosocial problems among adult burn victims. Burns Incl Therm Inj 1987; 13:7-14.
- Goodstein RK. Burns: An overview of clinical consequences affecting patient, staff, and family. Compr Psychiatry 1985; 26:43-57.
- Knudson-Cooper M. What are the research priorities in the behavioral areas for burn patients? J Trauma 1984; 24:S197-S202.
- Watkins PN, Cook EL, May SR, Ehleben CM. Psychological stages in adaptation following burn injury: A method for facilitating psychological recov-

- ery of burn victims. J Burn Care Rehabil 1988, 9:376-384.
- Miller WC, Gardner N, Mlott SR. Psychosocial support in the treatment of severely burned patients. J Trauma 1976; 16:722-725.
- Temasen JM, Hiebert JM. Burns and adjustment to inj. ry: Do psychological coping strategies help? J Trauma 1985; 25:1151-1155.
- Vanderplate C. A personal adaptation group for burn injured hospital patients. Int J Psychiatry Med 1982; 12:237-242.
- Goggins M, Hall N, Nack K, Shuart B. Community reintegration program. J Burn Care Rehabil 1990; 11:343-346.
- Kolman PBP. Managing psychopathology in burn patients. J Burn Care Rehabil 1984; S:239-243.
- Bailey EW, Moore DA. Group meetings for families of burn victims. Topics in Clinical Nursing 1980; 2:67-75.
- McHugh ML, Dimitroff K, Davis ND. Family support group in a burn unit. Am J Nurs 1979; 79:2148-2150.
- Roberts ML, Pruitt BA Jr. Nursing care. In Artz CP, Moncrief JA, Pruitt BA Jr., eds. Burns: A Team Approach. Philadelphia: WB Saunders; 1979:382– 389
- 20. Andreason NJC, Noyers RJr., Hartford CE. Factors influencing adjustment of burn patients during

- hospitalization. Psychosom Med 1972; 34:517-525.
- 21. Summers TM. Psychosocial support of the burned patient. Crit Care Clin North Am 1991; 3:237-244.
- Mannon JM. Caring for the Burned. Springfield, IL: Charles C. Thomas; 1985.
- Molter NC. Pain in the burn patient. In Puntillo KA, ed. Pain in the Critically III. Gaithersburg, MD: Aspen Publishers; 1>91:193-209.
- Cella DF, Perry SW, Kulchycky S, Goodwin C. Stress and coping in relatives of burn patients: A longitudinal study. Hosp Community Psychiatry 1988; 39:159-166.
- Hickey M. What are the needs of families of critically ill patients? A review of the literature since 1976. Heart Lung 1990; 19:401-415.
- 26. Molter NC. Research data. 1991: unpublished.
- Brodland GA, Andreasen NJC. Adjustment problems of the family of the burn patient. Social Casework 1974; 55:13-18.
- Reddish P, Blumenfield M. Psychological reactions in wives of patients with severe burns. J Burn Care Rehabil 1984; 5:388-390.
- Pauker SL. A new use for videorape in liaison psychiatry: A case from the burn unit. Gen Hosp Psychiatry 1986; 8:11-17.
- Tempereau M, producer. Reservoirs of Strength. Bravo Entertainment, 1989.

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